REMARKS

This Amendment is fully responsive to the final Office Action dated February 26, 2009, issued in connection with the above-identified application. Claims 1-13 are pending in the present application. With this Amendment, claim 1, 5-7 and 9-13 have been amended. No new matter has been introduced by the amendments made to the claims. Favorable reconsideration is respectfully requested.

The Applicants thank Examiner Campos for granting the telephone interview (hereafter "interview") with the Applicants' representative on April 29, 2009. During the interview, the distinguishable features between the present invention (as recited in independent claim 1) and the Awada and Haneda references were discussed.

Specifically, according to the Examiner, since Awada discloses that writing from a buffer to a flash device is performed in block units and that writing is performed when the buffer becomes full, the references judges whether the amount of data in the buffer is not smaller than a block size in order to write from the buffer to the flash device. It was also alleged by the Examiner that Awada must first determine whether a block of data has been accumulated in buffers in order to write to flash device.

However, it was noted that Awada discloses the following: "a Flash EEPROM has operations of a byte-rewrite-type EEPROM divided into an erase-operation and a data-write operation. A given device or a given block (hereinafter called a sector) is erased at once, and, thereafter, data can be electrically written in the erased device or portion (see ¶[0005]; "a buffer-memory module 36 for accumulating various monitoring data sent from the control board, and buffer memories (RAM) BUF1 and BUF2 each having a memory capacity for one-sector's worth of data" (see e.g., ¶[0010]; and "a FMEM-write process writes the accumulated data in the flash EEPROM FMEM1 by a unit of one block (sector) when the accumulated data becomes full in the buffer memory BUF1 or BUF2" (see e.g., ¶[0012]).

It was noted that based on the above discussion, Awada discloses that the buffer size is equal to the block size. However, the file buffer size according to claim 1 is larger than the

block size. Additionally, it was further noted that Haneda fails to overcome the deficiencies noted above in Awada.

At the conclusion of the interview, an agreement was reach with regard to amending the claims to help further distinguish the present invention from the cited prior art. In particular, it was agreed that the claims should be amended to point out that each of the file buffers is larger than a block size. Additional amendments were also discussed to address the rejection under 35 U.S.C. 101.

In Office Action, claim 11 has been objected to for being a substantial duplicate of claim 4. Claim 11 has been amended to now depend from independent claim 9. Claim 10 was also amended in a similar fashion. Accordingly, withdrawal of the objection to claim 11 is respectfully requested.

In Office Action, claim 6-8 and 13 have been rejected under 35 U.S.C. 101 for allegedly being directed to non-statutory subject matter. Specifically, the Examiner indicates that the claims currently recite the phrase "a computer-readable medium," which may include a medium used for supporting a transmission wave thereby making the claim non-statutory. Independent claims 6 and 7 have been amended to point out that the program is stored on a "computer-readable ***storage*** medium," which is consistent with the agreement reached during the interview. Withdrawal of the rejection to claims 6-8 and 13 under 35 U.S.C. 101 is now respectfully requested.

In the Office Action, claims 1-13 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Awada et al. (U.S. Publication No. 2002/0026566) in view of Haneda et al. (U.S. Patent No. 6,094,693.

Independent claims 1, 5-7, 9, 12 and 13 have been amended to help further distinguish the present invention from the cited prior art. The amendments made to independent claims 1, 5-7, 9, 12 and 13 are consistent with the agreement reached during the interview. For example, claim 1 (as amended) recites the following features:

"[a] file recording apparatus for recording data onto a recording medium which is written in clusters and erased in blocks each composed of a predetermined number of contiguous

clusters, the file recording apparatus comprising:

a receiving unit configured to receive a request for writing data of a specific one of a plurality of files onto the recording medium;

a plurality of file buffers each for a different one of the files, and each of said plurality of file buffers being larger than one block size;

a data accumulating unit configured to accumulate the data requested to be written, in one of the file buffers corresponding to the specific file;

a judging unit configured to judge whether data having been accumulated by the data accumulating unit is no smaller than a block size; and

a writing unit configured, if the judging unit judges affirmatively, to extract a block of data from the accumulated data and to write the extracted data into a free block of the recording medium, wherein

the judging unit judges that the accumulated data is no smaller than the block size, when a total of quotients each calculated by dividing a size of data accumulated in respective one of the file buffers by a cluster size is no smaller than the predetermined number, and

the writing unit extracts data from the respective file buffers cluster by cluster until the predetermined number of clusters is reached, and writes the extracted data to the free block of the recording medium." (Emphasis added).

The features emphasized above in independent claim 1 are similarly recited in independent claims 5-7, 12 and 13. Additionally, the features noted above are fully supported by the Applicants' disclosure.

As noted during the interview, the present invention (as recited in independent claims 1, 5-7, 9, 12 and 13) is distinguishable over the cited prior art in that a file recording apparatus for recording data onto a recording medium, which is written in clusters and erased in blocks each composed of a predetermined number of contiguous clusters, includes a plurality of file buffers each for a different one of the files, and each of said plurality of file buffers being larger than one block size. Additionally, a judging unit judges that the accumulated data is no smaller than the block size, when a total of quotients each calculated by dividing a size of data accumulated in

respective one of the file buffers by a cluster size is no smaller than the predetermined number; and a writing unit extracts data from the respective file buffers cluster by cluster until the predetermined number of clusters is reached, and writes the extracted data to the free block of the recording medium.

In the Office Action, the Examiner relies on the combination of Awada and Haneda for disclosing or suggesting all the features recited in independent claims 1, 5-7, 9, 12 and 13.

However, as noted during the interview, Awada discloses the following: "a Flash EEPROM has operations of a byte-rewrite-type EEPROM divided into an erase- operation and a data-write operation. A given device or a given block (hereinafter called a sector) is erased at once, and, thereafter, data can be electrically written in the erased device or portion" (see ¶[0005]; "a buffer-memory module 36 for accumulating various monitoring data sent from the control board, and buffer memories (RAM) BUF1 and BUF2 each having a memory capacity for one-sector's worth of data" (see e.g., ¶[0010]; and "a FMEM-write process writes the accumulated data in the flash EEPROM FMEM1 by a unit of one block (sector) when the accumulated data becomes full in the buffer memory BUF1 or BUF2" (see e.g., ¶[0012]).

Thus, Awada discloses that the buffer size is equal to the block size. However, the file buffer size according to the present invention (as recited in independent claims 1, 5-7, 9, 12 and 13) is larger than the block size. Additionally, Haneda fails to overcome the deficiencies noted above in Awada.

Based on the above discussion, no combination of Awada and Haneda would result in, or otherwise render obvious, independent claims 1, 5-7, 9, 12 and 13 (as amended). Additionally, no combination of Awada and Haneda would result in, or otherwise render obvious, claims 2-4, 8, 10 and 11 at least by virtue of their respective dependencies from independent claims 1 and 7.

In light of the above, the Applicants respectfully submit that all the pending claims are patentable over the prior art of record.

The Applicants respectfully request that the Examiner withdraw the rejections presented in the outstanding Office Action, and pass the present application to issue. The Examiner is invited to contact the undersigned attorney by telephone to resolve any remaining issues.

Respectfully submitted,

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